Remarks

Claims 33-46 and 55-65 are pending in this application. By this Amendment, claims 60-65 are amended. Reconsideration and further examination of the application are respectfully requested in view of the above amendments and the following remarks.

Entry of the amendments is proper under 37 CFR §1.116 since the amendments: (a) place the application in condition for allowance (for the reasons discussed herein); (b) do not raise any new issue requiring further search and/or consideration; (c) satisfy a requirement of form asserted in the previous Office Action; and (d) place the application in better form for appeal, should an appeal be necessary. The amendments are necessary and were not earlier presented because they are made in response to the new indefiniteness rejection raised in the final Office Action. Entry of the amendments is thus respectfully requested.

In item 3 on page 2 of the Office Action, claims 33-46 and 55-65 have been rejected under 35 U.S.C. § 112, second paragraph. Applicants have amended the claims as suggested by the Examiner. Accordingly, Applicants respectfully request that the rejection be reconsidered and withdrawn

In item 5 on page 3 of the Office Action, the Examiner has rejected claims 60, 40, and 41 under 35 U.S.C. § 103(a) as being unpatentable over Pocock et al. (U.S. 6,889,796) in view of WO 2002/35883 to Ikeda et al. (Ikeda '883) and WO 2000/54555 to Ikeda et al. (Ikeda '555). In item 6 on page 7 of the Office Action, the Examiner has rejected claims 33, 62, and 56 under 35 U.S.C. § 103(a) as being unpatentable over Pocock, Ikeda '883, and Ikeda '555 in view of Saiki et al. (U.S. 5,371,805); in item 7 on page 8 of the Office Action, the Examiner has rejected claims 34, 39, 46, 61, and 55 under 35 U.S.C. § 103(a) as being unpatentable over Pocock, Ikeda '883, and Ikeda '555 in view of Koura et al. (JP-A-05-122791) and Sacki et al. (JP-A-58221597); in item 8 on page 11 of the Office Action, the Examiner has rejected claim 35 under 35 U.S.C. § 103(a) as being unpatentable over Pocock, Ikeda '883, Ikeda '555, Koura, and Sacki in view of Sumiyama (JP-A-06-125594); in item 9 on page 12 of the Office Action, the Examiner has rejected claims 36 and 38 under 35 U.S.C. § 103(a) as being unpatentable over Pocock, Ikeda '883, Ikeda '555, Koura, and Sacki in view of Czerwinski (U.S. 2003/0068064); in item 10 on page 13 of the Office Action, the Examiner has rejected claim 37 under 35 U.S.C.

§ 103(a) as being unpatentable over Pocock, Ikeda '883, and Ikeda '555, and Koura in view of Irby et al. (U.S. 6,611,604); in item 11 on page 14 of the Office Action, the Examiner has rejected claims 42, 63, and 57 under 35 U.S.C. § 103(a) as being unpatentable over Pocock, Ikeda '883, and Ikeda '555 in view of Sumiyama; in item 12 on page 14 of the Office Action, the Examiner has rejected claims 43, 64, 58, and 45 under 35 U.S.C. § 103(a) as being unpatentable over Pocock, Ikeda '883, and Ikeda '555 in view of Czerwinski; and in item 13 on page 16 of the Office Action, the Examiner has rejected claims 44, 65, and 59 under 35 U.S.C. § 103(a) as being unpatentable over Pocock, Ikeda '883, and Ikeda '555 in view of Irby. These rejections are respectfully traversed.

As noted in the Amendment filed on March 28, 2008, independent claim 60 recites an edge comprising an inner peripheral portion 12, an arc portion 11 and an outer peripheral portion 13, the inner peripheral portion 12 of the edge member 1 extending from the outer peripheral portion of the diaphragm 2 to a radially innermost part of the arc portion and the outer peripheral portion 13 of the edge member 1 extending from the frame 5 to a radially outermost part of the arc portion 11; the radially innermost part of the arc portion 11 having a higher density than the radially outermost part of the arc portion; and the edge member being comprised of a foamed layer that is made of a foamed resin that includes both an independent foam 17a and a continuous foam 17b. The Examiner erroneously asserts that the combination of Pocock, Ikeda '883, and Ikeda '555 would have suggested these features.

In supporting the rejection of independent claim 60 over the combination of Pocock, Ikeda '883, and Ikeda '555, the Examiner recognized that the edge member of the speaker of Pocock does not include the features noted above, and thus relied upon Ikeda '883's teaching of a speaker edge 7a that is made of a foamed resin and Ikeda '555's teachings of a speaker edge that is made of a foamed resin to conclude that one having ordinary skill in the art would have found it obvious to employ such a speaker edge as taught by Ikeda '883 and Ikeda '555 in the speaker of Pocock. The Examiner supports this conclusion by asserting that since Pocock is concerned with the shape of the edge, Pocock does not disclose other important features, i.e., material properties, that must be taken into consideration when designing the edge of a speaker.

Applicants respectfully disagree with this assertion and submit that one of ordinary skill in the

art would not have found it obvious to employ the teachings of Ikeda '883 and Ikeda '555 for the following reasons.

In rejecting claims under 35 U.S.C. §103(a) the Examiner must provide a reason why one having ordinary skill in the pertinent art would have been led to modify the prior art or to combine prior art references to arrive at the claimed invention. The Examiner fails to identify any deficiency of the edge member in Pocock. The Examiner merely states that since Pocock is concerned with the shape of the edge, Pocock does not disclose other important features, i.e., material properties. However, Applicants disagree with this assertion. Pocock is directed to improving the shape and performance of the speaker edge (see, e.g., the Abstract). Pocock discloses that the material properties of the surround 18, i.e., speaker edge, were analyzed to determine ways to improve the performance of the speaker. In particular, col. 2, lines 61-67 of Pocock teaches that the materials ADFLEX and SARLINK are preferably used in creating the surround 18 because they are more flexible materials. Pocock discloses that this results in a surround having relatively constant stiffness over a significantly greater axial extension (see. e.g., col. 3, line 58-col. 4, line 7). In this regard, Pocock already provides a speaker edge that has improved properties such as flexibility and stiffness that result in improved performance. Thus, because the speaker edge in Pocock already provides an improved speaker edge that takes into consideration material properties, one of ordinary skill in the art would not have found it obvious to employ the speaker edge in either of Ikeda '883 or Ikeda '555 to improve the edge as alleged by the Examiner.

In addition, Applicants note that the Examiner did not address Applicants' arguments made in the response filed on March 28, 2008 regarding Ikeda '888's failure to disclose an edge comprising a radially innermost part of an arc portion having a higher density than the radially outermost part of the arc portion as required by claim 60. For the reasons indicated in the response filed on March 28, 2008, Applicants maintain that Ikeda '888 fails to disclose an edge comprising a radially innermost part of an arc portion having a higher density than the radially outermost part of the arc portion as required by claims 60-65. Ikeda '555 also fails to disclose an edge comprising a radially innermost part of an arc portion having a higher density than the radially outermost part of the arc portion as required by claim 60. Ikeda '555 merely discloses a

speaker edge 10 that includes a bent portion 15 that has thin base portions 15a and 15b (see, e.g., col. 3, lines 46-54 and Fig. 1). As shown in Fig. 1 of Ikeda '555, thin base portion 15a and 15b are formed at opposite ends of the bent portion 15. More specifically, thin base portion 15a is formed at a radially innermost part of the bent portion 15 and thin base portion 15b is formed at a radially outermost part of the bent portion 15. Ikeda '555 teaches only that the density at the thin base portions 15a and 15b is higher than any other thick portions (see, e.g., col. 6, lines 53-56). Ikeda '555 does not teach that the density of the thin base portion 15a formed at the radially innermost part of the bent portion 15 is higher than the density of the thin base portion 15b formed at the radially outermost part of the 15, or vice versa. As such, Ikeda '555 fails to teach the claimed edge as required by claim 60.

Accordingly, for at least the reasons discussed above, the combination of Pocock, Ikeda '883, and Ikeda '555 would not have suggested an edge member that includes an inner peripheral portion, an arc portion and an outer peripheral portion, the inner peripheral portion of the edge member extending from the outer peripheral portion of the diaphragm to a radially innermost part of the arc portion and the outer peripheral portion of the edge member extending from the frame to a radially outermost part of the arc portion, and the radially innermost part of the arc portion having a higher density than the radially outermost part of the arc portion as required by claim 60. Further, none of the other variously applied references remedy the deficiencies of Pocock, Ikeda '883, and Ikeda '555. Thus, it is respectfully submitted that claim 60 is clearly allowable over the prior art of record.

Like claim 60, independent claims 61-65 also recite that the edge includes an inner peripheral portion, an arc portion and an outer peripheral portion, and that the edge is defined to indicate that a radially innermost part of the arc portion has a higher density than a radially outermost part of the arc portion. Thus, for reasons similar to those discussed above with respect to claim 60, independent claims 61-65 also are clearly allowable over the prior art of record. Further, claims 33-46 and 55-59 also are allowable by virtue of their dependencies.

For at least the above reasons, the rejections of independent claims 60-65 are improper. Further, by virtue of their dependencies, the rejections of claims 33-46 and 55-59 are also improper. Thus, allowance of claims 33-46 and 55-65 is respectfully requested. If the Examiner persists in the prior art rejections, the Examiner is nonetheless requested to enter the above claim amendments so as to overcome the § 112, second paragraph rejection in the manner suggested by the Examiner, to thereby place the application in better form for appeal.

In view of the foregoing, it is respectfully submitted that the present application is in condition for allowance and an early Notice of Allowance is carnestly solicited.

If after reviewing this Amendment, the Examiner believes that any issues remain which must be resolved before the application can be passed to issue, the Examiner is invited to contact the Applicants' undersigned representative by telephone to resolve such issues.

Respectfully submitted,

Shinya TABATA et al.

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